

Parachute Laboratories, Inc.

**1665 Lexington Ave. #106 DeLand, FL 32724 USA
(386) 734-5867 FAX (386) 734-8464 www.jumpshack.com**

Safety Notice

Inspection Instructions

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Background:

The USPA has issued a Safety Advisory concerning a number of systems that failed to deploy their reserve parachutes after they had been activated by AAD at some 750 feet. One of the TSO performance requirements for a container system is that the reserve must open within 300 feet post activation, if the reserve canopy is less than 240 sq. ft. The Advisory provided no specific instructions on how to inspect for this condition, just to inspect. Some riggers have encountered containers that will not release the reserve bag while being spun around by the reserve bridle. This may be acceptable but how is the rigger to know? It is the purpose of this notice to provide guidance for the rigger to accept or reject any Parachute Labs product that might have excessive extraction forces.

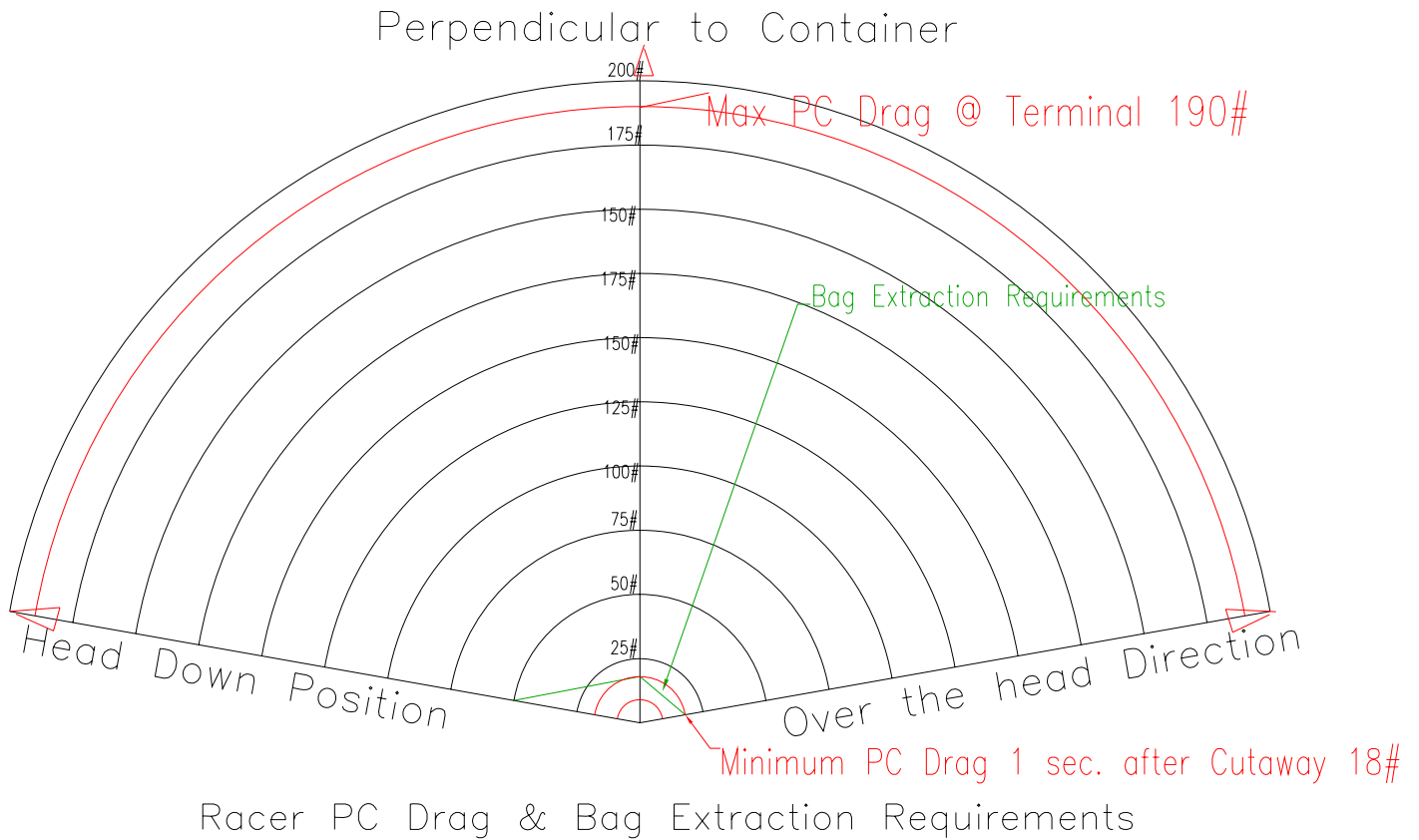
Modern parachutes require some retention by the container to assure proper sequencing of the deployment. It is the amount of retention that is in question. The simple answer to that question is, "The amount of retention by the container must be less than the drag of the pilot chute". Riggers can measure the extraction forces but they have no facility to measure the drag of a pilot chute. Likewise most manufacturers don't know the drag capability of their pilot chutes and are therefore reluctant to provide an extraction specification.

Parachute Labs, Inc./Jump Shack has never had a reserve failure. However, we try to learn from others mistakes and we therefore investigate all fatalities and incidents for root cause. To that end, after studying the failures referred to in the advisory, we have developed criteria for the rigger in the field to use to evaluate Racers, thus the crux of this notice.

Procedure:

Each container should be evaluated with both the main and reserve containers full and packed for use. Three separate tests should be made from this condition. The container should be donned and with the wearer lying on their stomach simulating a freefall position, the reserve ripcord pulled. The reserve pilot chute bridle is then attached to a force measurement scale. The force measurement device (e.g., heavy duty fish scale) is used to pull the bridle in the direction over the head of the wearer, simulating a vertical feet to earth deployment for the first test. The bag extraction force should be observed and recorded. This test should be repeated two more times, once pulling in a direction straight up from the wearers back simulating a flat and stable deployment and once back

over the feet of the wearer simulating a head down position. The results of these three tests should be then compared to the included chart for compliance. The three tests may be repeated for consistency but the container must be completely closed and packed for each test. The head down position is expected to result in a considerable amount of extraction force; however this position is unlikely at low speeds.



The bag extraction must not exceed the levels indicated on the chart. If they do it is cause for rejection and the rigger should contact Parachute Labs.